REMARKS

Claims 1-10, 14-52, 58-60 and 65-68 are pending in this application. Claims 1-10 and 14-52 are withdrawn from consideration. Claims 11-13, 53-57 and 69-72 have been cancelled. Claims 58-60 and 65-68 have been rejected under 35 U.S.C. § 102(e) and § 103(a). Claim 65 has been amended, support for which can be found at least in the Specification, page 3, paragraph [0062]. It is believe no new matter has been added.

Rejection under Section 102(e)

In the Office Action dated October 10, 2007, the Examiner had specifically stated that claims 58, 59 and 65-67 are in condition for allowance. Even though Applicants have not amended the claims since then, the Examiner now rejected claims 58-60 and 65-68 under 35 U.S.C. § 102(e) as being anticipated by Ni et al., U.S Application No. 2002/0151009 (hereinafter "Ni et al."). Claims 58-60 recite an isolated antibody that specifically recognizes amino acids 791-1054 of the polypeptide having the amino acid sequence shown in SEQ ID NO:4, e.g., for the manufacture of a medicament, e.g., for the prophylaxis or treatment of breast cancer. Amended claims 65-68 recite an isolated antibody that specifically recognizes one or more of the three C-terminal fibronectin III repeats of mammalian tenascin W, e.g., for the manufacture of a medicament, e.g., for the prophylaxis or treatment of breast cancer.

The Examiner argued that Ni et al. teaches antibodies that bind to a human protein homologous to the tenascin W protein (e.g., SEQ ID NO. 29) and that the antibodies may be polyclonal or monoclonal wherein said antibodies are in therapeutic compositions for the treatment of hyperproliferative disease including breast cancer. The Examiner argued that because the terminal region of the protein taught by Ni et al. share 84% homology with SEQ ID NO:4 of the invention and Ni et al. teaches polyclonal antibodies, and polyclonal antibodies bind to multiple epitopes of a single protein, the polyclonal antibody of Ni et al. would bind to the C terminal region of SEQ ID NO. 4. Therefore, the Examiner asserted that all of the limitations of the claims have been met.

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As a preliminary matter, Applicants seek clarification as to which claims the Examiner rejected in the current Office Action dated April 7, 2008 ("Current Office Action"). The examiner has explicitly stated in the previous Office Action dated October 10, 2007 ("Previous Office Action") that claims 58, 59 are in condition for allowance. Claim 60 was only rejected under 35 U.S.C. § 112, first paragraph for lack of enablement in the Previous Office Action. The Examiner withdrew the rejection under § 112 in the Current Office Action in light of Applicants amendment to claim 60 on March 10, 2008. Claims 58 and 59 have not been amended since they were in condition for allowance. While the Examiner rejected all of the claims in the Current Office Action, the Examiner's arguments are directed only to claims 65-68. Therefore, Applicants seek clarification as to whether the rejections under 35 U.S.C. § 102(e) only apply to claims 65-68 or all of the claims.

In the event that the Examiner rejected all of the claims, Applicants respond as follows. SEQ ID NO.29 of Ni et al. contains 84 amino acid residues compared to a total of 1294 residues of SEQ ID NO.4 of the invention. SEQ ID NO.29 of Ni et al. therefore only has a 6.5% homology to the SEQ ID NO.4 of the present invention. Moreover, claims 58-60 specifically require that the antibodies of the invention specifically recognize amino acids 791-1054 of the polypeptide of SEQ ID NO.4. Ni et al. does not disclose that the antibodies bind that that region of tenascin-W. Even though Ni et al. teaches polyclonal antibodies and polyclonal antibodies bind to multiple epitopes of a single protein, Ni et al. nevertheless does not disclose that the polyclonal antibodies bind to amino acids 791-1054 of tenascin W. Similarly, claims 65-68 require that the antibodies bind to one or more of the three C-terminal fibronectin III repeats of tenascin W region of SEQ ID NO.4. Although polyclonal antibodies bind to multiple epitopes, the reference does not disclose that these polyclonal antibodies bind to the C-terminal fibronectin III repeats of tenascin W. Therefore, Ni et al. does not disclose every element of the claims of the invention and therefore does not anticipate the invention. Applicants respectfully request the Examiner to withdraw the rejections under 35 U.S.C. § 102(e).

Rejection under Section 103(a)

The Examiner rejected claims 58, 65 and 66 under 35 U.S.C. § 103(a) as being unpatentable over Weber et al., Journal of Neurobiology (1998) 35:1-16) (hereinafter "Weber et al.") in view of Campbell (Monoclonal Antibody Technology (1984) pages 1-32) (hereinafter "Campbell"). The Examiner argued that Weber et al teaches the sequence tenascin-W protein of zebrafish and that the C-terminal fibronectin III domains are different from other members of the tenascin family. Because Campbell teaches that it is routine to produce monoclonoal antibodies to macromolecules, the Examiner reasoned that one skilled in the art would have been motivated to and had a reasonable expectation of success to have produced an antibody that recognizes the C terminal fibronectin III region of tenascin W. The Examiner therefore concluded that it would have been prima facie obvious for one skilled in the art to use the protein of Weber et al. to produce an antibody as taught in Campbell.

As a primary matter, Applicants have amended claim 65 to direct to an isolated antibody that specifically recognizes one or more of the three C-terminal fibronectin III repeats of mammalian tenascin W. Nevertheless, Applicants respectfully disagree with the Examiner. In determining obviousness under 35 U.S.C. § 103(a), one must first determine the scope and contents of the prior art; ascertain the differences between the prior art and the claims at issue; resolve the level of ordinary skill in the pertinent art; and evaluate the obviousness or nonobviousness of the subject matter against this background. Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966). In the case at hand, the Examiner has not established a prima facie case of obviousness by ascertaining the differences between the prior art and the claims of the invention. Although Weber et al. discloses the sequence of zebrafish tenascin-W, the Examiner has not established what the relationship is between the polypeptides of the invention and zebrafish tenascin-W of Weber et al. While the Examiner argueds that Cterminal of fibronectin III repeats are different from other members of the tenascin family and antibody to this region would differentiate tenascin W from other members of the tenascin family, it is not clear how antibodies that differentiate other members of the tenascin family from tenascin W in zebrafish would make obvious antibodies that bind to the epitope of the tenascin W of the current invention. Therefore, in using the protein disclosed in Weber et al. to produce antibodies, one skilled in the art would not have arrived at the antibodies of the invention.

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Applicants further add that amended claims 65 is directed to antibodies that bind to specific regions of mammalian tenascin W while Weber et al. discloses Tenascin W of zebrafish. It would not have been obvious for one skilled in the art to produce the antibodies which bind to specific regions of mammalian tenascin W of the invention by using the protein disclosed in Weber et al. in combination with the teaching of Campbell.

For reasons stated above, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103(a).

CONCLUSION

Applicant respectfully submits that the claims are now in condition for allowance and notification to that effect is earnestly requested. This response is filed within the shortened statutory period of three months from the date of the mailing of the non-final office action, which response is due **July 7, 2008**. Therefore, it is believed no fees are required. Should this be incorrect, the Commissioner is authorized to charge any additional fees, or credit any overpayment, to deposit account No. 50-4255.

Respectfully submitted,

Date____July 7, 2008

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